

Reply to Final Office Action of December 19, 2005
Amendment Dated: February 6, 2006

Appl. No.: 10/708,800
Attorney Docket No.: H0005591

Listing of Claims

1 **Claim 1 (Canceled)**

1 Claim 2 (Currently Amended): A high resolution potentiometer comprising:
2 a first digital potentiometer and a second digital potentiometer connected in parallel,
3 wherein said first digital potentiometer is operable to be set to offer a first resistance and said
4 second digital potentiometer is operable to be set to offer a second resistance, wherein said
5 first resistance is not equal to said second resistance; and
 a controller block to cause said first digital potentiometer and said second digital
 potentiometer to respectively offer said first resistance and said second resistance.

1 **Claim 3 (Canceled)**

1 Claim 4 (Currently Amended): The high resolution potentiometer of claim 2 3,
2 wherein said controller block receives a desired resistance value and sets said first digital
3 potentiometer to provide said first resistance and said second digital potentiometer to provide
4 said second resistance such that the effective resistance provided by said high resolution
5 potentiometer at least substantially equals said desired resistance.

1 Claim 5 (Currently Amended): The high resolution potentiometer of claim 2 3,
2 wherein said controller block receives values corresponding to said first resistance and said
3 second resistance, and sets said first digital potentiometer to provide said first resistance and
4 said second digital potentiometer to provide said second resistance such that the effective
5 resistance provided by said high resolution potentiometer at least substantially equals a
6 desired resistance.

1 Claim 6 (Currently Amended): The high resolution potentiometer of claim 2 3, further
2 comprising a resistor connected in series with said first digital potentiometer and said second
3 digital potentiometer connected in parallel.

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1 Claim 7 (Previously Amended): A high resolution potentiometer comprising:
2 a first digital potentiometer and a second digital potentiometer connected in parallel,
3 wherein said first digital potentiometer is operable to be set to offer a first resistance and said
4 second digital potentiometer is operable to be set to offer a second resistance, wherein said
5 first resistance is not equal to said second resistance; and

6 a controller block to cause said first digital potentiometer and said second digital
7 potentiometer to respectively offer said first resistance and said second resistance.

8 wherein said first potentiometer, said second potentiometer and said controller block
9 are implemented in a single integrated circuit.

1 Claim 8 (Currently Amended): A system comprising:

2 a first digital potentiometer and a second digital potentiometer connected in parallel,
3 wherein said first digital potentiometer is operable to be set to offer a first resistance and said
4 second digital potentiometer is operable to be set to offer a second resistance, wherein said
5 first resistance is not equal to said second resistance; and

6 a controller block to cause said first digital potentiometer and said second digital
7 potentiometer to respectively offer said first resistance and said second resistance.

1 Claim 9 (Canceled):

1 Claim 10 (Currently Amended): The system of claim 8 9, wherein said controller
2 block receives a desired resistance value from said a processor and sets said first digital
3 potentiometer to provide said first resistance and said second digital potentiometer to provide
4 said second resistance such that the effective resistance provided by said system at least
5 substantially equals said desired resistance.

1 Claim 11 (Currently Amended): The system of claim 8 9, wherein said controller
2 block receives values corresponding to said first resistance and said second resistance from
3 said a processor, and sets said first digital potentiometer to provide said first resistance and
4 said second digital potentiometer to provide said second resistance such that the effective

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5 resistance provided by said first digital potentiometer and said second digital potentiometer
6 are connected in parallel at least substantially equals a desired resistance.

1 Claim 12 (Currently Amended): The system of claim ~~8~~ 9, further comprising a resistor
2 connected in series with said first digital potentiometer and said second digital potentiometer
3 connected in parallel.

1 Claim 13 (Previously Amended): A system comprising:
2 a first digital potentiometer and a second digital potentiometer connected in parallel,
3 wherein said first digital potentiometer is operable to be set to offer a first resistance and said
4 second digital potentiometer is operable to be set to offer a second resistance, whereinsaid
5 first resistance is not equal to said second resistance;
6 a controller block to cause said first digital potentiometer and said second digital
7 potentiometer to respectively offer said first resistance and said second resistance; and
8 wherein said first potentiometer, said second potentiometer and said controller block
9 are implemented in the form of a single integrated circuit.

1 Claim 14 (Original): The system of claim 13, further comprising a processor, wherein
2 said controller block receives a desired resistance value from said processor and sets said
3 first digital potentiometer to provide said first resistance and said second digital
4 potentiometer to provide said second resistance such that the effective resistance provided
5 by said system at least substantially equals said desired resistance.